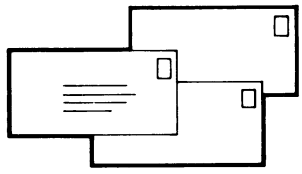

Letters to the Editor

Letters are welcomed and will be published, if found suitable, as space permits. The editors reserve the right to edit and abridge lettes, to publish replies, and to solicit responses from authors and others.

Letters should be submitted in duplicate, double-spaced (including references), and generally should not exceed 400 words.

Should We Educate for Motorcycle Safety Helmet Use?

The dialogue over the issue of whether motorcyclists should be required by law to wear safety helmets[1–3] was instructive, but is likely to remain moot. Now that we appear to be committed to moving away from legislating helmet use toward greater individual responsibility, the next issue we can expect to face is the formulation of public policy on the use of educational approaches to nonuse of motorcycle helmets. Both the Motorcycle Safety Foundation, a private industry-supported organization, and the Federal National Highway Traffic Safety Administration have already endorsed education as a means to promote use, and have supported research efforts to develop and evaluate educational materials and persuasive communications designed to encourage voluntary helmet use.

Should we commit public funds and other resources to the development and implementation of education campaigns designed to encourage helmet use? If we are speaking of directing educational efforts solely at the motorcycle-riding public, the answer is no. Although one recent study suggests that education might reasonably be expected to result in some increased frequency of use by individuals already so disposed,[4] we have no evidence that such efforts alone could result in acceptable levels of helmet use by motorcyclists. For example, Maryland's helmet-use law was repealed in 1979; a report by the Motorcycle Safety Foundation,[5] which presents data on the frequency of helmet use in Maryland prior to and following a public information campaign that followed the repeal, indicated that the level of use dropped from 68 per cent to 56 per cent over the one-year study period.

Perhaps a more realistic approach—one in which education may be able to play a more effective role—might be to attempt to educate about the necessity and benefits of legislation itself, as Simonds has suggested in speaking of issues in public health education.[6] In this case, efforts to educate might be directed toward enabling the motorcycle-riding public *and* other influential publics—particularly decision-makers in the motorcycle industry and the vast majority of the general public who favors enactment and enforcement of helmet-use laws—to better understand the socio-political and ethical issues involved. Perhaps we need to help people better understand why, in certain cases, society may need to balance the rights of individual freedom of choice with that of the public good. To consider educational intervention in any other limited scope will only doom us to repeat past mistakes, when education has so often been prescribed but used as an ill-conceived scheme to address health and social problems in which hazardous or deviant behavior has been implicated.

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Smokers Eat More, Weigh Less than Nonsmokers

One interesting point noted and discussed in our recent article on "Smoking and Weight"[1] was that smokers of 15–29 cigarettes per day weighed approximately 5.5 pounds less, yet in dietary recalls reported approximately 150 calories more consumed than nonsmokers. Recently published data about middle-aged men at entry into the Multiple Risk Factor Intervention Trial[2] (MRFIT) agree with this observation. In this latter study, smokers (not differentiated by number of cigarettes smoked per day) weighed four pounds less than nonsmokers, yet reported 200 more calories consumed. A single dietary recall methodology was used in both the Lipid Research Clinics and in MRFIT.

These additional data provide further evidence of the validity of the "weigh less—eat more" phenomenon observed in smokers. It has not been ascertained whether this discrepancy is due to factors such as increased utilization of calories due to adrenalin release, increased bowel motility, decreased food absorption, or increased nervousness with consequent increased moving about and caloric expenditure. However, the message to

smokers wishing to stop smoking remains clear: during and after cessation adjust your diet and/or physical activity levels to maintain constant weight.

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Assessing the Value of Negative Associations

The recent article by Johnson and Specht[1] is one of what seem to be an increasing number of papers[2–4] which suggest protective effects of various agents or exposures by demonstrating relative risk (or odds ratio estimates) that are less than unity. I am not writing to criticize this approach but I am concerned about the general interpretation of relative risk when used as a measure of negative association.

In assessing possible causal associations between exposure factors and disease when the relative risks are observed to be greater than unity, it is customary to place more value in high relative risks than in low relative risks, particularly those that are 2.0 or less. This is, of course, a restatement of the strength of association criterion for causality[5] and follows from the consideration that a confounding variable would be unlikely to alter the relative risk greatly away from unity in the absence of any other associations. Such caution in the interpretation of relative risks should also be observed in assessing the value of negative associations, that is, relative risks less than 1.0. In doing so, however, one must remember that relative risks are not distributed in a straight linear fashion. While positive association may be indexed by any value of the relative risk greater than 1.0 the range of relative risks for indexing a negative association is limited to the interval between zero and one. To overcome this difficulty, the logarithm of the relative risk should be examined.[6] If one does so for some of the data in question, one finds a relative risk estimate of 0.72 (as one example) attained by Johnson and Specht to be the negative equivalent of a relative risk estimate of only 1.39 in the positive direction. It is not until relative risk estimates of 0.50 or less than 0.50 are reached that the values of the measure reach equivalence in the negative direction with high relative risks of 2.0 or more in the positive direction.

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Addressing the Sources of Violence Is Public Health Priority

In regard to the letter addressing "Violence: Is It a Public Health Problem" (AJPH March 1981, p 319), I would agree with Mr. Hovey's answer of "yes" but feel that his subsequent approach is missing the mark.

To quote from the letter, "the violent-prone individual is the result of a phenomenon of complex biological, sociological, environmental, and genetic interaction." Agreed. However, for these very reasons the strategy outlined by Mr. Hovey is one that aims at the curing of the afflicted individual and not at stemming the sources of the problem.

Violence affects every segment of U.S. society; it is a phenomenon that touches everyone's lives. Our society maintains quite an accepting attitude towards the use of violence, as evidenced by government policy, lack of legislative restrictions on gun-control (Mr. Hovey quoted the FBI's yearly report in saying that 49% of the over 18,000 murders committed in the US in 1978 involved the use of a hand gun), the widespread depiction of violence in the media, in advertising, etc. It is as if bombardment of the individual can occur indefinitely, mounting unrestrained to the tune of bigger dollars for the strongest interest groups, as long as there exists the belief—and interest—on the part of health providers that it is "our job" to "fix them up again" so that they may lead socially and personally productive lives. This is not what public health is about.

In "serving society—protecting health" we seek strategies that are cost-effective and appropriate in preventing the *loss* of health. The way to combat rising violence in society is not through the expensive hands of a highly trained team of health professionals concerned with treatment, although certainly rehabilitation is needed, but through actions that involve both the health profession and the community it serves.

Health is a social concern, not simply a medical one. As trained, knowledgable leaders in this field we as public health workers will make the greatest impact if we address ourselves to the sources of the epidemic, be it of violence or Legionnaires' Disease, and not only toward returning the afflicted person to health.

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